

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Tank Programs Division
Corrective Action Section

DRAFT
NO FURTHER ACTION (NFA) & MONITORED
NATURAL ATTENUATION (MNA) RULE

[Revision 4/06/2007]

1 TITLE 18. ENVIRONMENTAL QUALITY
2 CHAPTER 12. DEPARTMENT OF ENVIRONMENTAL QUALITY - UNDERGROUND
3 STORAGE TANKS
4

5 ARTICLE 1. DEFINITIONS; APPLICABILITY
6

7 **R18-12-101. Definitions**

8 In addition to the definitions prescribed in A.R.S. §§49-1001 and 1001.01, the terms used in
9 this Chapter have the following meanings:

10 "Monitored natural attenuation" means the reliance on natural attenuation processes, within the
11 context of a carefully controlled and monitored site cleanup approach, to achieve site-
12 specific remediation objectives within a time frame that is reasonable compared to that
13 offered by other more active methods. [NOTE: from EPA, OSWER Directive 9200.4-
14 17P]

15 "Natural attenuation" means a reduction in mass or concentration of a chemical of concern in
16 groundwater over time or distance from the release point due to naturally occurring
17 physical, chemical, and biological processes, such as: biodegradation, dispersion,
18 dilution, sorption, and volatilization. [NOTE: taken from ASTM Standard E-1943]

19 "Source of contamination" means with respect to Chapter 12, the conditions described in
20 A.R.S. §49-1052(N).

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22 ARTICLE 2. TECHNICAL REQUIREMENTS
23

24 **R18-12-263.04. Groundwater LUST Case Closures**

25 A. Applicability. Pursuant to A.R.S. §49-1005(E), the Director may approve a corrective action
26 that may result in aquifer water quality exceeding aquifer water quality standards after
27 completion of the corrective action in accordance with one of the following:

- 1 1. A Tier 2 or Tier 3 evaluation in accordance with R18-12-263.01(A)(2) or (3); and (4); or
- 2 2. The process described in this section.

3 B. Site-specific requirements. The Director may approve LUST case closure where there is
4 an exceedance of an aquifer water quality standard without requiring the placement of
5 institutional controls on the deeds of all properties affected by the groundwater
6 contamination related to the UST release, after consideration of the following:

- 7 1. Characterization of the groundwater plume;
- 8 2. Source removal or control;
- 9 3. Groundwater plume stability;
- 10 4. Natural attenuation;
- 11 5. Threatened or impacted drinking water wells;
- 12 6. Other exposure pathways; and
- 13 7. Other information that may be pertinent to the LUST case closure approval.

14 C. Public notice. If, after consideration of the criteria specified in subsection (B), the
15 Department determines that the LUST site is eligible for LUST case closure, the
16 Department shall provide public notice in accordance with R18-12-264.01.

17 D. Conditions for approval of LUST case closure. After consideration of comments obtained
18 through the public notice process, the Department shall evaluate whether the LUST case
19 meets the requirements of this Section and A.R.S. §49-1005; and determine if the LUST
20 case closure can be approved.

21 E. Notice of LUST case closure decision. The Department shall provide written notice to the
22 owner or operator whether the LUST case closure is approved.

23 F. Future corrective actions. Subsequent to LUST case closure, if the Department becomes
24 aware of site-specific conditions that warrant additional corrective actions, the LUST case
25 file may be re-opened and the UST owner or operator will be required to perform additional

corrective actions necessary to comply with the requirements of R18-12-261 through R18-12-264.01. However, if a no further action letter was issued by the Department in accordance with R18-12-265, the additional corrective actions will be performed by the Department in accordance with A.R.S. §§49-1015.01 and 1017; unless the no further action letter was rescinded in accordance with R18-12-265(G).

R18-12-264.01. Public Participation

A. Public notice. If public notice is required by A.R.S. §49-1005, or rules made under that Section, the Department shall provide a minimum of 30 calendar days notice to the public regarding a public comment period. The Department shall use ~~a methods~~ method of public notice designed to reach those members of the public directly affected by the release and the planned corrective actions ~~including, which may include, but is not limited to one or more of the following:~~ including, which may include, but is not limited to one or more of the following: publication in a newspaper of general circulation, posting at the facility, mailing a notice to ~~owners of property affected or potentially affected by contamination from the release and corrective actions~~ applicable persons, or posting on the Department's internet site. ~~If a CAP includes a corrective action standard for water based on a Tier 2 or Tier 3 evaluation, the Department~~ At a minimum, the notice shall be sent ~~send a copy of the notice to the UST owner and operator, owners of property directly affected or potentially directly affected by contamination from the release and corrective actions,~~ the Arizona Department of Water Resources, the applicable county and any municipality ~~where the CAP will be implemented,~~ water service providers and persons having water rights that may be impacted by the release.

B. Public notice contents. The Department shall provide notice to the public that includes all of the following:

- 1 1. Identifies the name of the document ~~submitted to the Department~~ that is available for
- 2 public comment;
- 3 2. Identifies the facility where the release occurred and the site of the proposed corrective
- 4 actions.
- 5 3. If the document is a CAP, identifies the date the ~~document~~ CAP was submitted to the
- 6 Department and name of person who submitted the ~~document~~ CAP;
- 7 4. Provides a specific explanation if a corrective action standard for water is based on a
- 8 Tier 2 or Tier 3 evaluation;
- 9 5. Identifies ~~at least 2 locations~~ the location where a copy of the document can be viewed
- 10 by the public, ~~including the Department's Phoenix office and the public library located~~
- 11 ~~nearest to the LUST site~~;
- 12 6. Explains that any comments on the document shall be sent to the Underground
- 13 Storage Tank Program of the Department within the time frame specified in the notice;
- 14 and
- 15 7. Describes the public meeting provisions of subsection (C).
- 16 **C. Public meeting.** ~~After consideration of the amount of public interest, and before approving~~
- 17 ~~a document requiring public participation, the~~ The Department may hold a public meeting to
- 18 receive comments on a document undergoing public review. If the Department holds a
- 19 public meeting, the Department shall schedule the meeting and notify the public, in
- 20 accordance with subsection (A), of the meeting time and location.
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22 **R18-12-265. Monitored natural attenuation (MNA) Program**

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- 24 **A. MNA Program eligibility.** An UST owner or operator, or a person who undertakes
- 25 corrective actions pursuant to A.R.S. §49-1052(I) may request that the Department perform

1 corrective actions in accordance with A.R.S. §49-1015.01(D) beginning July 1, 2011, if the
2 following conditions occur:

- 3 1. The UST release or releases of a regulated substance were reported to the Department
4 before July 1, 2006; and are eligible for SAF in accordance with A.R.S. §49-1052;
- 5 2. Source removal or control is complete, to the extent practicable;
- 6 3. The soil contamination associated with the release is at or below the applicable
7 corrective action standards in accordance with R18-12-263.01;
- 8 4. Natural attenuation is occurring;
- 9 5. A corrective action plan in accordance with R18-12-263.02, has been approved in which
10 monitored natural attenuation is all or a portion of the selected remedy; and
- 11 6. A MNA Program application in accordance with subsection (B) has been submitted and
12 approved by the Department before July 1, 2010.

13 B. Contents of an MNA Program application. The MNA Program application shall be in a form
14 prescribed by the Department and contain:

- 15 1. Information on the applicant;
- 16 2. Information on the applicable release(s);
- 17 3. Environmental media currently impacted by the applicable release(s);
- 18 4. A site vicinity map, site location map and a site plan;
- 19 5. The as built construction diagrams of existing monitoring wells;
- 20 6. A tabulation of soil and groundwater analytical results and water level data;
- 21 7. Documentation that source removal or control has been completed to the extent
22 practicable;
- 23 8. Documentation that natural attenuation is occurring; and
- 24 9. Other information that may be pertinent to the MNA Program application approval.

1 C. Conditions for approval of a MNA Program application. After receipt of a MNA Program
2 application submitted in accordance with subsection (A), the Department shall review and
3 either approve, deny or request modifications to the application. The Department may
4 request additional information before acting on the application. The Department shall
5 approve the application if the application submitted in accordance with subsections (A) and
6 (B), and this subsection is complete; and the information in the application is approved by
7 the Department. Approval of an application under this section means that a no further
8 action letter as described in subsection (E) will be sent to the applicant and the Department
9 will perform future corrective action in accordance with subsection (F), unless the
10 application and no further action letter is rescinded under subsection (G).

11 D. Notice of approval of a MNA Program application. The Department shall provide written
12 notice to the applicant that the MNA Program application has been approved by issuing a
13 no further action letter in accordance with subsection (E).

14 E. Contents of no further action letter. The no further action letter shall notify the applicant of
15 the following:

- 16 1. That the Department is not requiring the applicant to perform additional corrective
17 actions for soil or groundwater for the property at which the referenced UST release
18 occurred;
- 19 2. That soil contamination associated with the release is at or below the applicable
20 corrective action standards in accordance with R18-12-263.01;
- 21 3. That groundwater contamination associated with the release is above the applicable
22 corrective action standards in accordance with R18-12-263.01;
- 23 4. That additional corrective actions will be performed by the Department as specified in
24 subsection (F);

1 5. That the Department shall not approve closure of the LUST case file under R18-12-
2 263.03(D) until the applicable groundwater corrective action standards in accordance
3 with R18-12-263.01, or the conditions of R18-12-263.04, are met for the groundwater
4 contamination;

5 6. The conditions of subsection (G) that may result in rescinding the MNA Program
6 application and no further action letter; and

7 7. That the Department is requiring:

8 a. A property access agreement from the UST owner or operator if they own the
9 property, or from the person who undertakes corrective actions pursuant to
10 A.R.S. §49-1052(I), which allows the Department to access the property to
11 perform the necessary corrective actions specified in subsection (F); and

12 b. A transfer of ownership of applicable monitor wells selected by the Department to
13 be used to perform the corrective actions specified in subsection (F), from the
14 UST owner or operator, or a person who undertakes corrective actions pursuant
15 to A.R.S. §49-1052(I) to the Department.

16 c. The proper abandonment of monitor wells not selected by the Department for
17 future monitoring, and

18 d. The decommissioning of any remedial equipment not selected by the
19 Department.

20 F. Additional corrective actions. The following corrective actions will be performed by the
21 Department in accordance with A.R.S. §§49-1015.01 and 1017:

22 1. Activities related to monitoring the natural attenuation of the groundwater contamination
23 related to the UST release;

24 2. Other necessary corrective actions in accordance with A.R.S. §49-1005, if information,
25 which was previously not known to the Department, is received by the Department

1 which indicates that soil or groundwater contamination on the property at which the
2 referenced UST release occurred does not meet the appropriate corrective action
3 standard in accordance with R18-12-263.01; and

4 3. Other necessary corrective actions in accordance with A.R.S. §49-1005, if site
5 conditions change rendering monitored natural attenuation not adequate to meet the
6 appropriate corrective action standard in accordance with R18-12-263.01.

7 G. Rescinding an approved MNA Program application and no further action letter. The
8 Department may rescind the MNA Program application and no further action letter
9 approved under subsection (C) and require the UST owner or operator to perform
10 corrective actions pursuant to A.R.S. §49-1005, if the information submitted pursuant to
11 subsections (A), (B) or (C) was inaccurate, false or misleading.

12 13 **ARTICLE 9. REGULATED SUBSTANCE FUND**

14 15 **R18-12-901. Monitored Natural Attenuation Account**

16 A. Use of monitored natural attenuation account monies. Pursuant to A.R.S. §49-1015.01(D),
17 monies deposited in the regulated substance fund on July 1, 2011, may be used by the
18 Director to perform corrective actions at SAF eligible LUST sites if all of the following
19 documents are approved by the Department before July 1, 2010:

- 20 1. A corrective action plan in accordance with R18-12-263.02, in which monitored natural
21 attenuation is all or a portion of the selected remedy; and
22 2. A MNA Program application in accordance with R18-12-265.

23 B. Exception. Pursuant to A.R.S. §49-1015.01(D), monies in the fund may be used by the
24 Director to perform corrective actions at LUST sites that meet the criteria of sub-section (A)

1 but the Department has subsequently determined that monitored natural attenuation is not
2 adequate to meet the conditions of A.R.S. §49-1005(D).

3 C. Performance of corrective actions. The Director may perform corrective actions which are
4 required by this section in a manner consistent with the corrective actions performed in
5 accordance with A.R.S. §49-1017.